Claims

1. A kit comprising:

a first set of primers selected so that one of the primers hybridizes to a first portion of a human β_2-adrenergic receptor gene, which first portion includes a sequence encoding position 16 of said human β_2-adrenergic receptor, in such a manner that, when used in a polymerase chain reaction, said second set of primers amplifies said portion when position 16 is Arg but not when position 16 is Gly; and

a second set of primers selected so that one of the primers hybridizes to a first portion of a human β_2-adrenergic receptor gene in such a manner that, when used in a polymerase chain reaction, said second set of primers amplifies said portion when position 16 is Gly but not when position 16 is Arg,

said first and second sets of primers being provided together in a container.

2. The kit of claim 1 further comprising a component selected from the group consisting of: amplification buffer, water, DNA polymerase, first control DNA including a first human β_2-adrenergic receptor gene that encodes Arg at human β_2-adrenergic receptor position 16, second control DNA including a second human β_2-adrenergic receptor gene allele that encodes Gly at human β_2-adrenergic receptor position 16, instructions for use, and combinations thereof.

3. A kit comprising:

a primer set selected to hybridize to a human β_2-adrenergic receptor gene in such a manner that, when used in a polymerase chain reaction, the primer set amplifies a portion of said human β_2-adrenergic receptor gene, which portion includes a sequence encoding human β_2-adrenergic receptor residue 16; and

reagents for determining the nucleotide sequence of said amplified portion,

said primer set and reagents being arranged together in a container.

4. The kit of claim 3, wherein said reagents are selected from the group consisting of: a sequencing primer that hybridizes to a piece of said amplified portion in such a way that allows extension across said sequence encoding human β_2-adrenergic receptor residue 16, DNA polymerase, dNTPs, ddNTPs, buffer, and combinations thereof.

5. The kit of claim 3, wherein said sequencing primer is fluorescently labeled for use in an automated genetic analyzer.

6. The kit of claim 3 further comprising a component selected from the group consisting of amplification buffer, water, DNA polymerase, first control DNA including a first human β_2-adrenergic receptor gene that encodes Arg at human β_2-adrenergic receptor position 16, second control DNA including a second human β_2-adrenergic receptor gene allele that encodes Gly at human β_2-adrenergic receptor position 16, instructions for use, and combinations thereof.

7. A kit comprising:

an oligonucleotide primer that hybridizes to a portion of a human β_2-adrenergic receptor gene, which portion includes a sequence encoding residue 16 of the human β_2-adrenergic receptor, said oligonucleotide having higher affinity for said portion when said sequence encodes Arg than it has when said sequence encodes Gly; and

an oligonucleotide primer that hybridizes to a portion of a human β_2-adrenergic receptor gene, which portion includes a sequence encoding residue 16 of the human β_2-adrenergic receptor, said oligonucleotide having higher affinity for said portion when said sequence encodes Gly than it has when said sequence encodes Arg.